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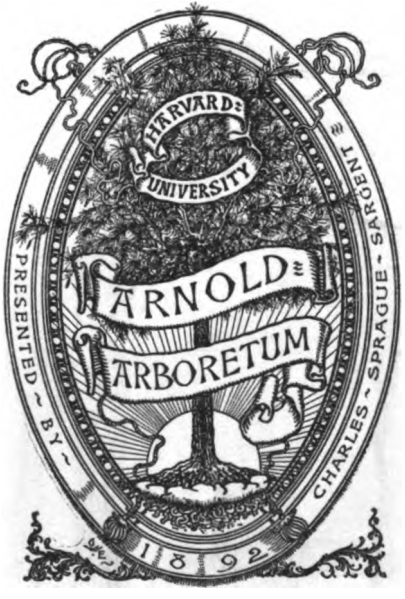


A Guide to Find the Names of All Wild-growing Trees and Shrubs of New England by Their Leaves

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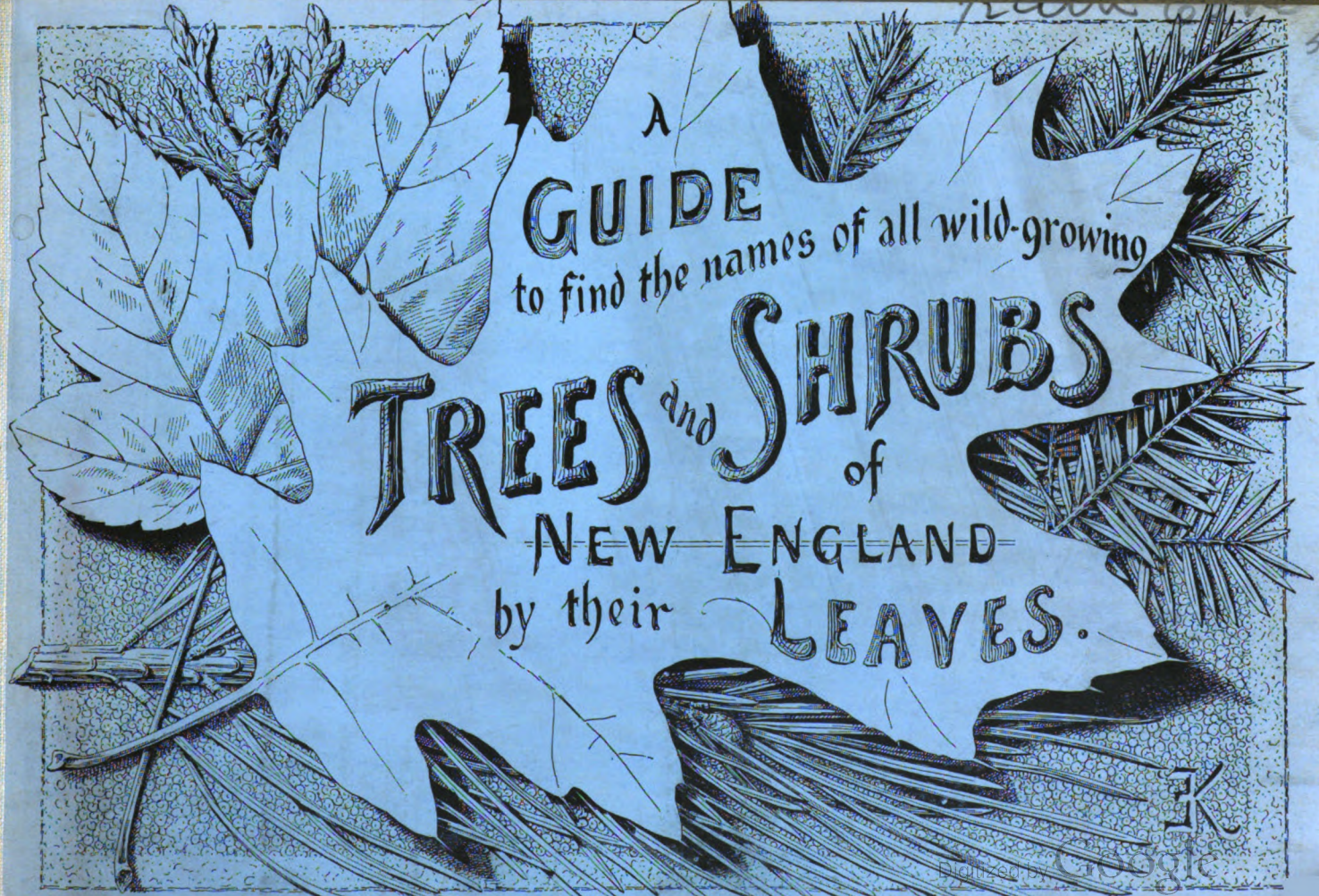
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A GUIDE TO FIND THE NAMES

OF ALL WILD-GROWING

TREES AND SHRUBS

OF

NEW ENGLAND

BY THEIR LEAVES

By EDWARD KNOBEL.

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To find the name of a tree or shrub. Choose a few leaves from the middle of a branch; leaves on young shoots are often deformed.

1. Observe if the leaf is:

(*a*) *Feather shaped* (pinnate); *i. e.*, composed of 3 or more leaflets on the main leafstalk, like the rays on a feather.



(*b*) *Hand shaped* (palmate); *i. e.*, the main veins spreading from the end of the leafstalk like the fingers of a hand.



(*c*) *Simple; i. e.*, of one piece which may be divided, lobed, or cut up in various ways.



2. Observe if the leaves grow:

(*a*) *Opposite* each other, in 3's or in clusters.



(*b*) *Alternate* with each other.



This may be easily observed on young shoots.

3. Observe if the edge of the leaf is:

(*a*) *Double sawtoothed.*



(*b*) *Single sawtoothed or toothed.*

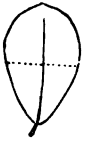


(*c*) *Wavy or smooth.*

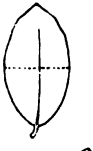


4. Observe if the general shape of leaf is:

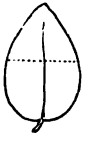
(*a*) *Pear shaped* (obovate); *i. e.*, the upper half wider than lower half.



(*b*) *Oval; i. e.*, both halves about equal.



(*c*) *Egg shaped* (ovate); *i. e.*, the lower half wider than upper half.



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A drawing of the leaf and a number referring to description may be found if the leaf is:

(*a*) *Feather shaped* and *alternate*, on plates I., II., or III.

„ „ „ *opposite*, on plate IV., in clusters, II., 16.

(*b*) *Hand shaped* and *alternate*, on plate V. or VI.

„ „ *opposite*, on plates VI., XII., 144, 145.

(*c*) *Simple*, *alternate*, and *cut up*, *divided*, or *lobed*, on plates VI., VII., VIII.

„ „ „ *double sawtoothed*, on plates VIII., IX., XII., 134.

„ „ „ *wavy sawtoothed*, on plates VII., XII., 138.

„ „ „ *sawtoothed*, and round, long stemmed, on plate X.

„ „ „ „ „ long and narrow, on plate X.

„ „ „ „ „ oval, on plates VIII., 64, 68, IX., 77, XI., XII.

„ „ „ „ the teeth small and indistinct, on plates X., XIII.

„ „ „ *smooth*, on plates XIII., X., 94, 95, 107, 108, 109, XI., 122, 125, 130, XIV., 193.

„ *opposite*, and *sawtoothed*, on plate XII.

„ „ „ *smooth*, on plate XIV.

(*d*) *Needle shaped* (like the spruce and the pine), on plate XV.

NOTE. If several leaves similar to the one under examination be found in the plate, read the key to that plate which gives the distinctive marks of difference.

Compare main ribs and veins of leaf with the drawing.

Illustration 119 appears almost opposite, though it grows alternate.

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Plate I. Nut Trees.

- (*a*) 5 to 9 leaflets.
 - Side leaflets not symmetrical on the leaf stalk.
 - 5 leaflets; first 3 much larger than last 2; middle leaflet *pear shaped*, *fine* sawtoothed 1
 - Middle leaflet *oval*, *dull* sawtoothed . . . 2
 - Side leaflets symmetrical on leaf stalk.
 - Middle leaflet on short footstalk 3
 - Middle leaflet, no footstalk 4
- (*b*) Many leaflets.
 - Not symmetrical on footstalk 5
 - Symmetrical on footstalk 6

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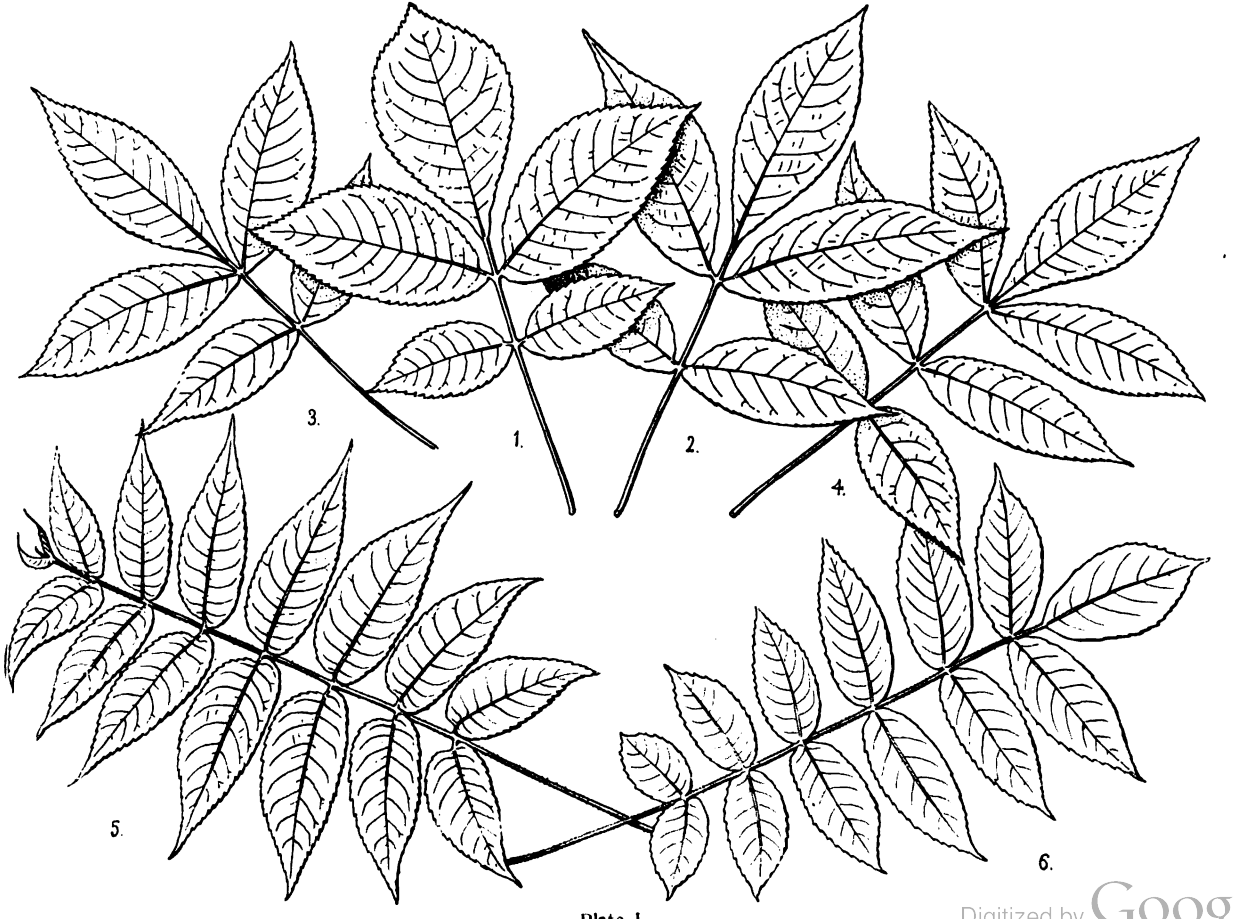


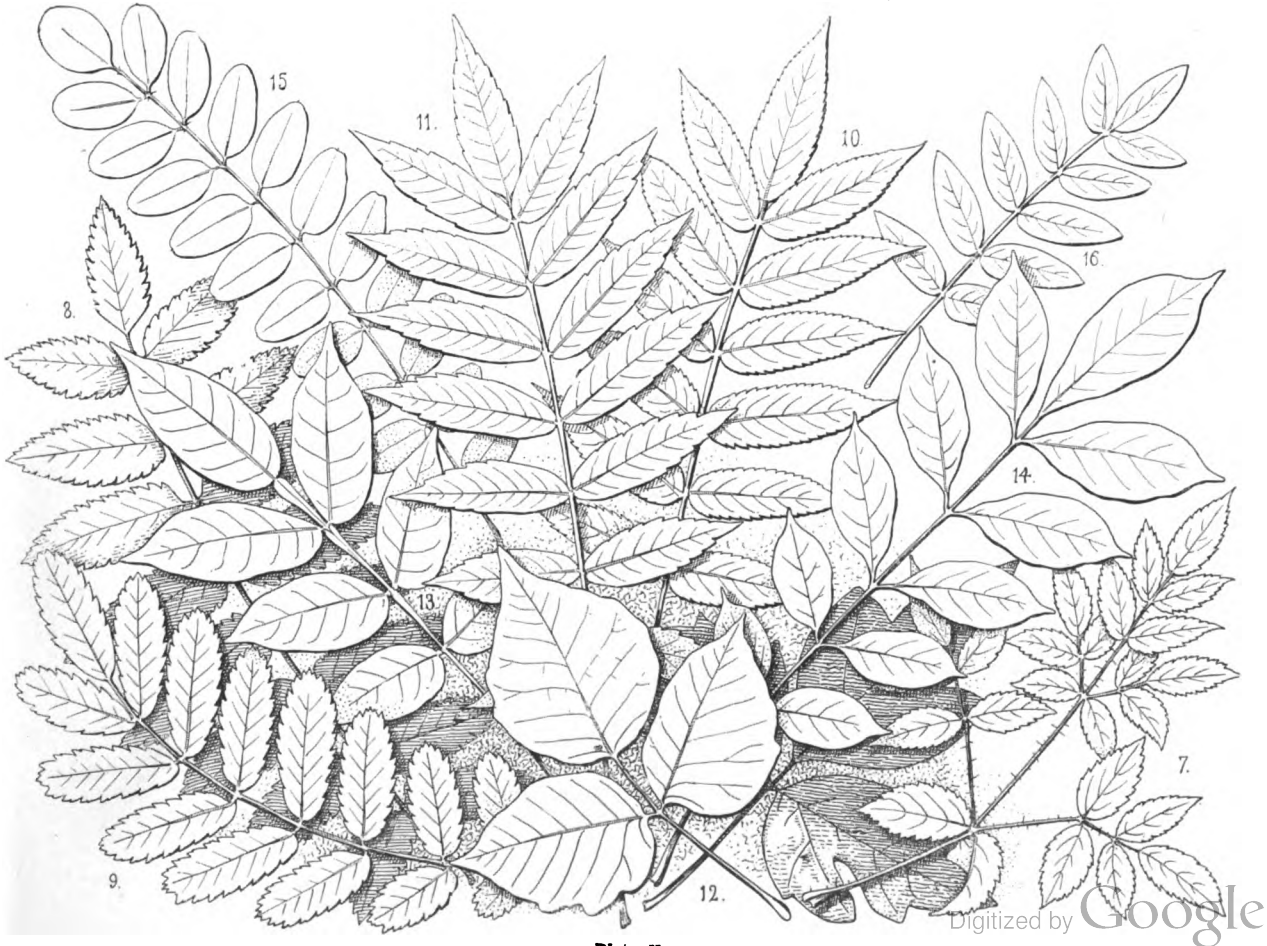
Plate I.

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Plate II.

- Leaves, double feather shaped 7
- Leaflets, double sawtoothed.
 - Pointed 8
 - Rounded 9
- Leaflets, sawtoothed.
 - Young shoots, very woolly 10
 - Young shoots smooth 11
- Leaflets, smooth.
 - 3 leaflets, irregularly notched, a vine 12
 - Leaflets on short stalks, *main stalk winged* 13
 - No footstalk on leaflets, *grow in clusters* 16
 - Leaflets on footstalks, *pointed* 14
 - Leaflets on footstalks, *rounded* at point 15

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Plate II.

Plate III. Blackberry, Raspberry, and Roses.

- Leaflets pointed; 3 or 5 on young shoots.
 - White underneath.
 - Weak prickles; if 5 leaflets, the last 2 the largest . . . 17
 - Stout thorny; if 5 leaflets, the last 2 the smallest . . . 18
 - Green both sides.
 - No prickles, middle leaflet diamond shaped 19
 - Stout thorns, rough woolly . . 20
 - Weak prickles, smooth trailing, 21
- Leaflets blunt.
 - 3 leaflets, evergreen, trailing, *blunt* sawtoothed 22
 - 5 or more leaflets.
 - *Weak prickles*, *sharp* sawtoothed 23
 - *Stout thorns*, sharp sawtoothed 24

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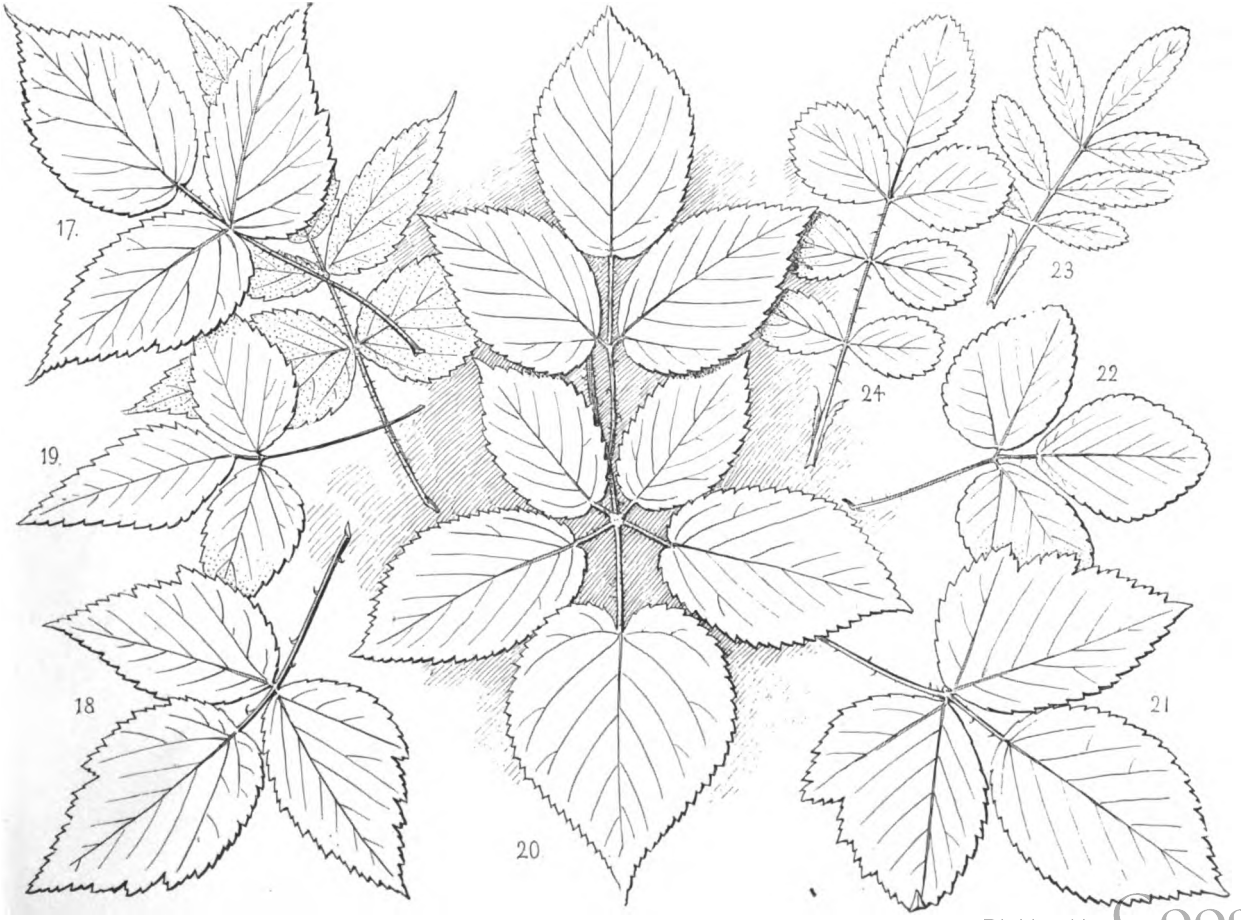


Plate III.

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Plate IV.

- 3 leaflets.
 - Vine; irregular sawtoothed 25
 - Shrub; fine and regular sawtoothed 26
- 5 or more leaflets.
 - Shrubs; sharp sawtoothed.
 - Pith in young shoots *brown* 27
 - Pith in young shoots *white* 28
 - Trees.
 - Fine sawtoothed, no stalks to leaflets 29
 - Irregular, indistinct sawtoothed.
 - Short leafstalks, slightly hairy . 30
 - Larger leafstalks, smooth . . 31

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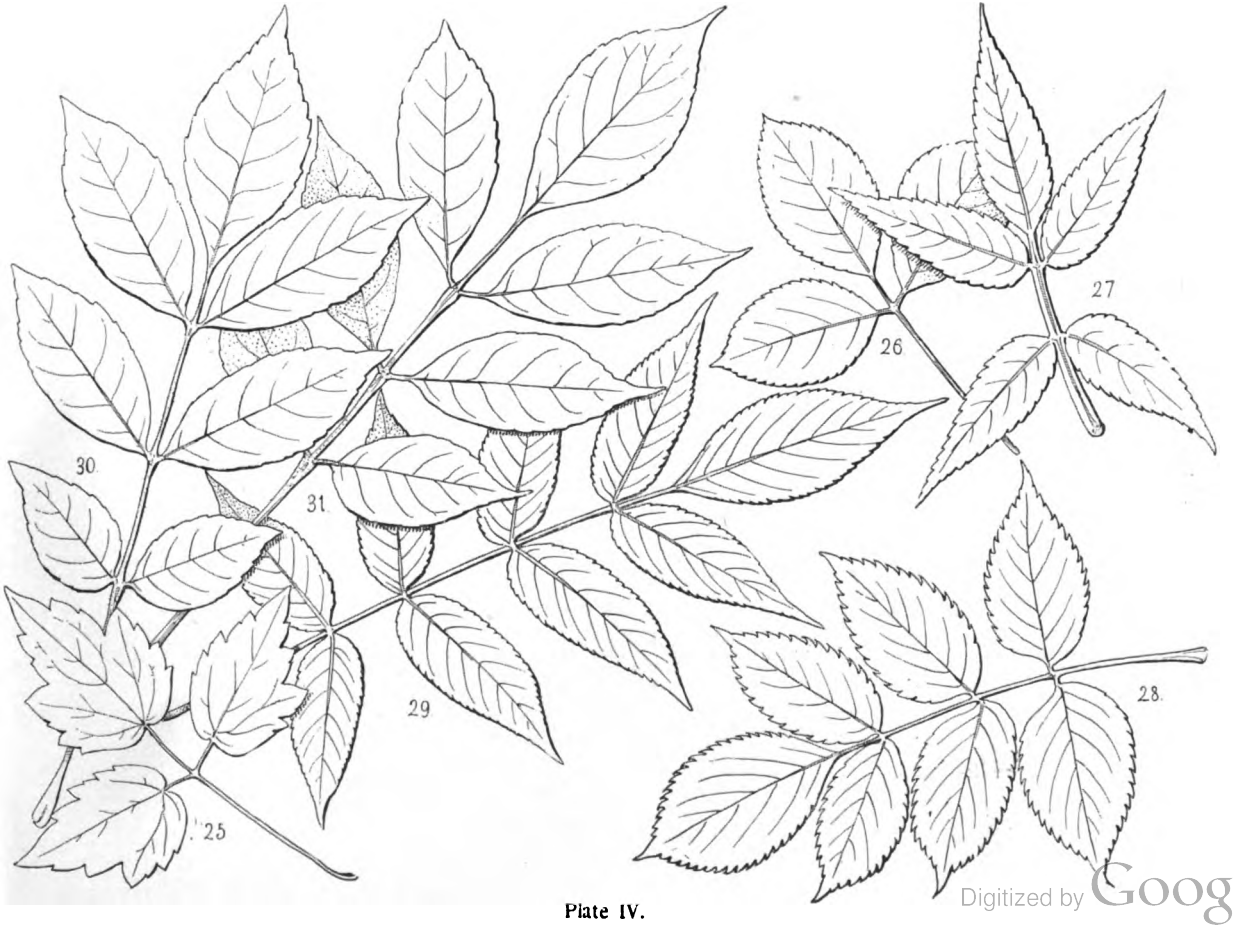


Plate IV.

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Plate V.

- **Trees.**
 - Leaf broad, irregular toothed 32
 - Star shaped, fine and regular sawtoothed 33
- **Shrubs.**
 - Thorny, prickly.
 - Leaf deeply divided 34
 - Slightly divided 35
 - Medium depth divisions.
 - 1 thorn below each leaf, on shoots . . 36
 - 3 thorns below each leaf, on shoots . . 37
 - Not prickly.
 - Fine sawtoothed 38
 - Irregular sawtoothed.
 - Berry black 39
 - Berry red, smooth 40
 - Berry red, bristly 41

Vine; leaf shield shaped 42

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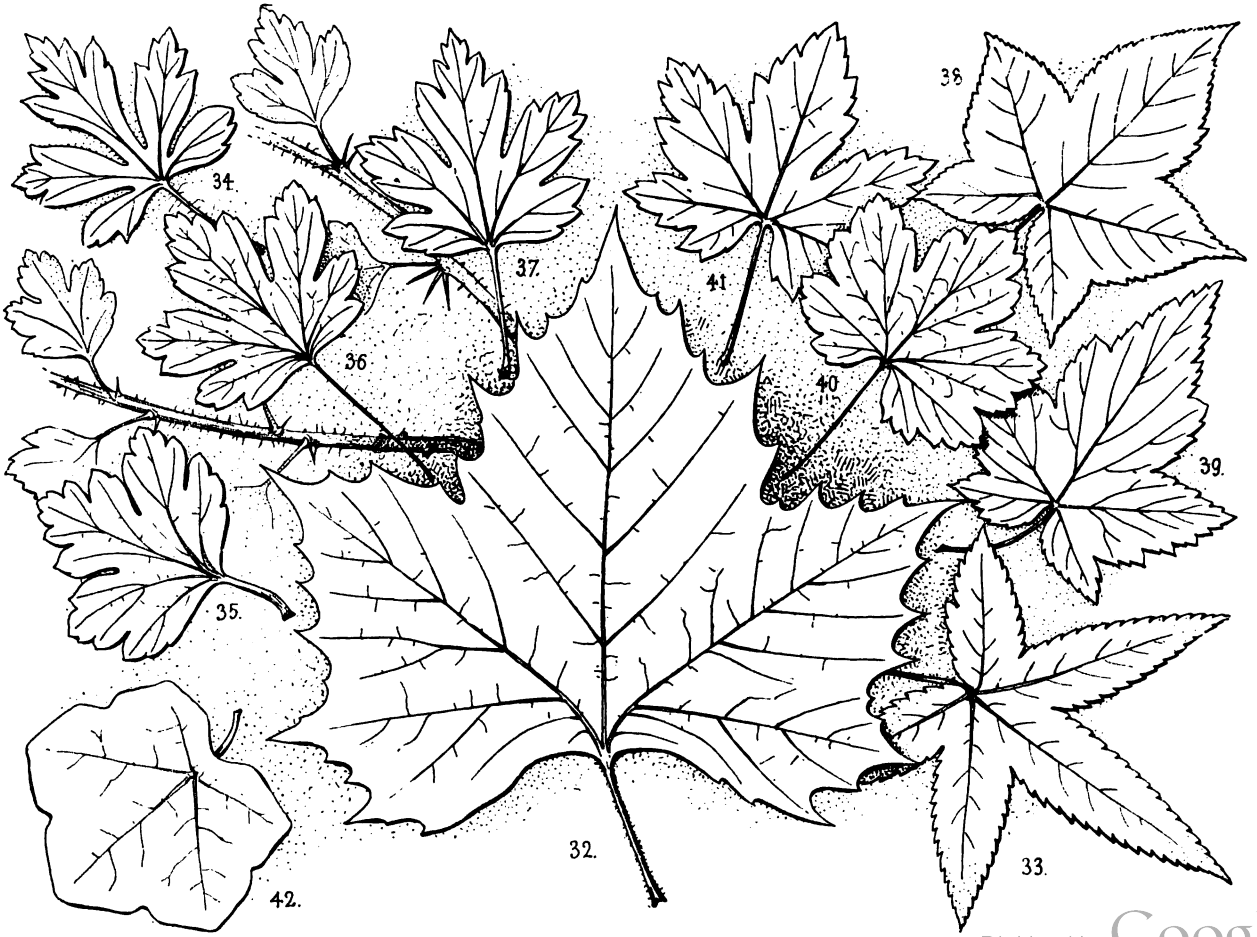


Plate V.

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Plate VI.

- Leaves *alternate*.
 - Vines.
 - 5 separate leaflets 48
 - Cut-out toothed, white and woolly below 49
 - Blunt sawtoothed, rusty and woolly on veins, pale below 50
 - Sharp, coarse sawtoothed, green and smooth both sides 51
- Leaves *opposite*.
 - Trees and shrubs.
 - Leaf deep 5 divided, sparingly toothed.
 - Sharp, cut in . . 43
 - Roundish, cut out, 44
 - Leaf less deep 3 or 5 divided, irregular sawtoothed . . . 45
 - Leaf slightly 3 or 5 divided, coarse sawtoothed 46
 - Leaf slightly 3 divided, fine double sawtoothed 47

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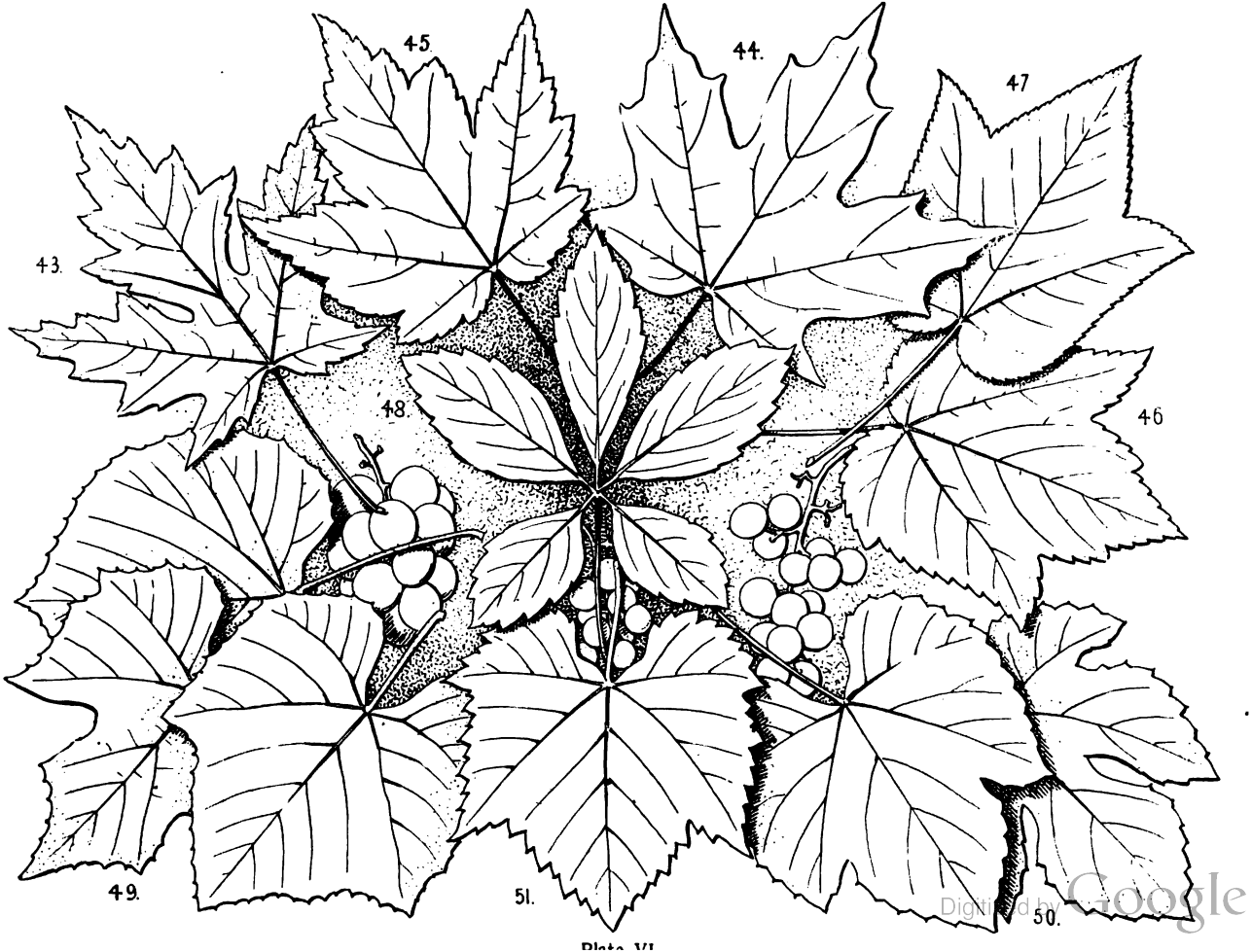


Plate VI

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Plate VII. Oaks.

- **Rounded lobes.**
 - Cross shaped, rough 52
 - Very irregular, smooth 53
 - Almost regular, smooth 54
 - Irregular, wavy, smooth 55
- **Regular, wavy, toothed.**
 - Pear shaped.
 - Roundish teeth 56
 - Pointed teeth 57
 - Long oval, roundish teeth 58
- **Pointed lobes.**
 - Pear shaped.
 - 5 angular lobes, often irregular 59
 - Slight or half-way cut, pointed at leafstalk 60
 - Oval.
 - Half-way cut lobes 61
 - Very irregular, deep-cut lobes, straight at leafstalk 62

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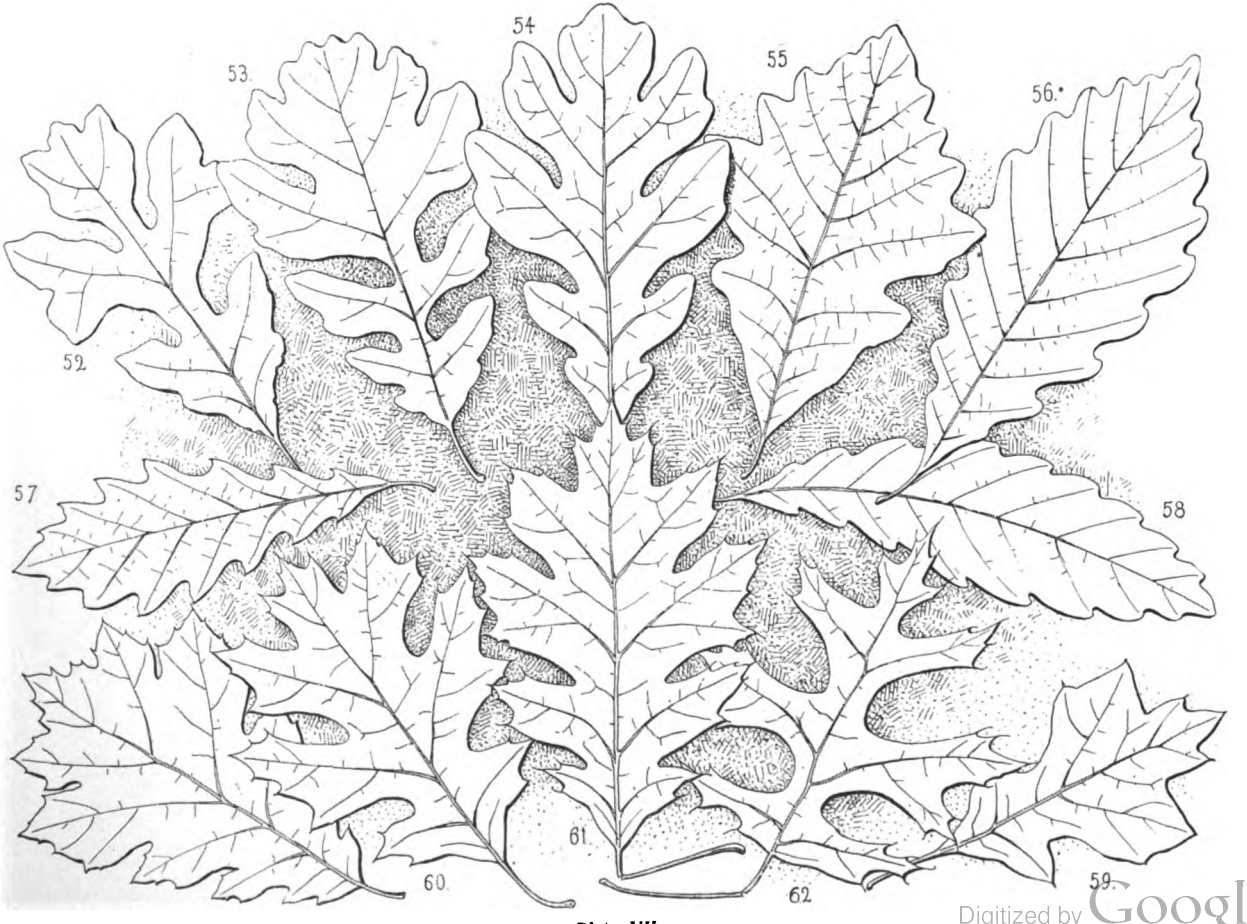


Plate VII.

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Plate VIII.

- Egg shaped, double sawtoothed.
 - Stem not thorny.
 - Teeth roundish, often 3 lobed, heart shaped, 84
 - Teeth sharp, pointed 63
 - Stem thorny.
 - Often cut and lobed, leafstalk slender . . . 65
 - Sides of leafstalk leaflike 66
- Pear shaped.
 - Slightly irregular toothed, short leafstalk 64
 - Sharp double sawtoothed, long leafstalk 67
 - Only upper half sawtoothed, short stalk 68
- Not toothed, lobed.
 - Middle lobe pointed 69
 - Middle lobe cut off straight 70
 - Long and narrow, many round lobes 71

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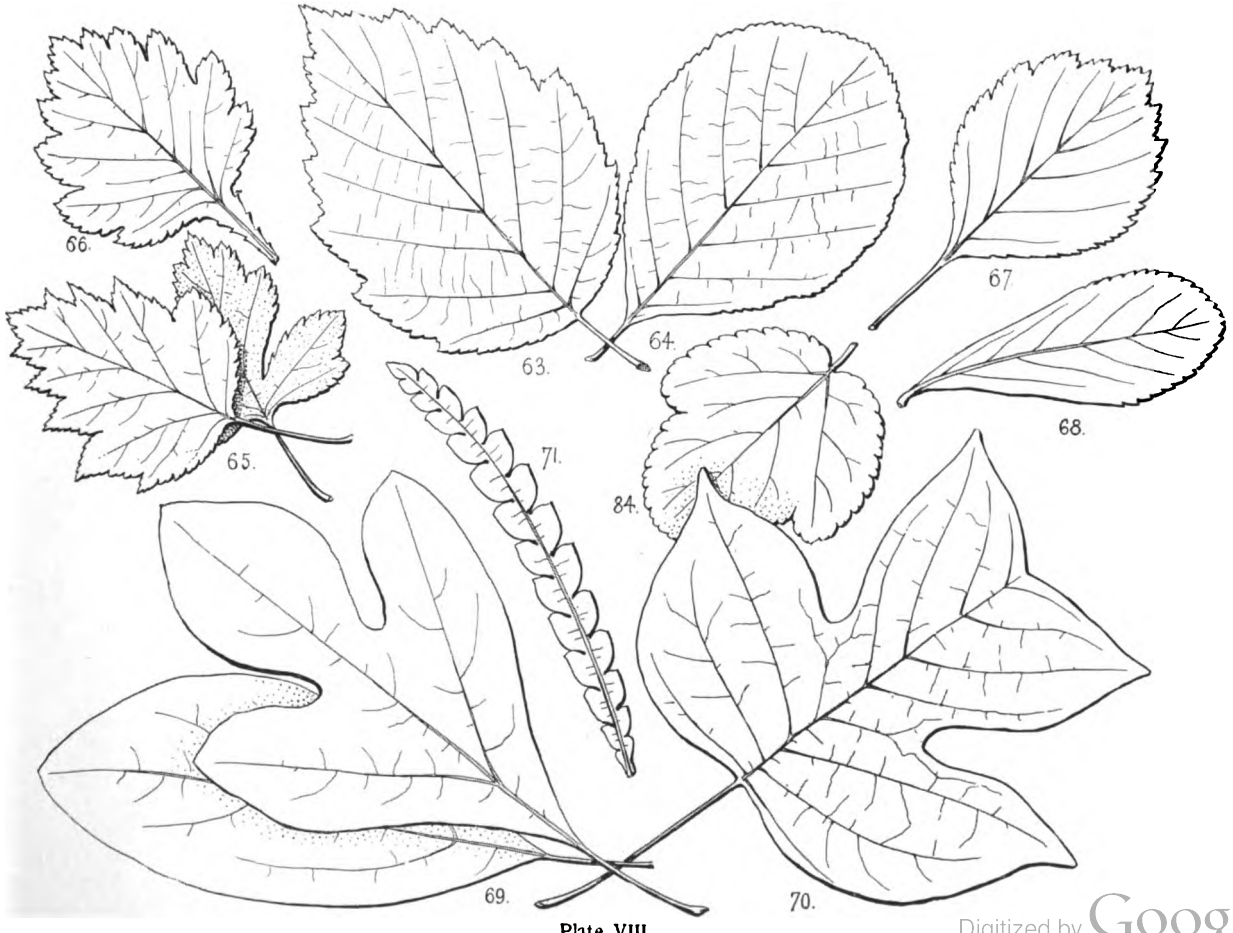


Plate VIII.

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Plate IX.

Leaves irregular, one half unlike other half.

Large hooked teeth, footstalk uncovered 85

Teeth less hooked, leafstalk covered by upper half of leaf 86

Leaves regular.

Oval.
- Leaves grow in 2's on last year's shoots,
 - Bark purple gray, smooth 72
 - Bark dirty gray, ragged, paper-like 73
- Leaves single, bark leaden gray, smooth 78

Pear shaped.
- Tree; leaves grow single, bark ash gray, cracked 79
- Shrub; large leaves, heart shaped at leafstalk 80
- Shrub; small leaves, pointed at leafstalk 82

Egg shaped.
- Point and teeth rounded 83
- Point and teeth sharp, leaf large 81

Triangular; bark white and smooth; tree 74

Heart shaped; bark white and smooth; tree 75

Diamond shaped; bark reddish, broken, and ragged; tree 76

Round, single sawtoothed; shrub 77

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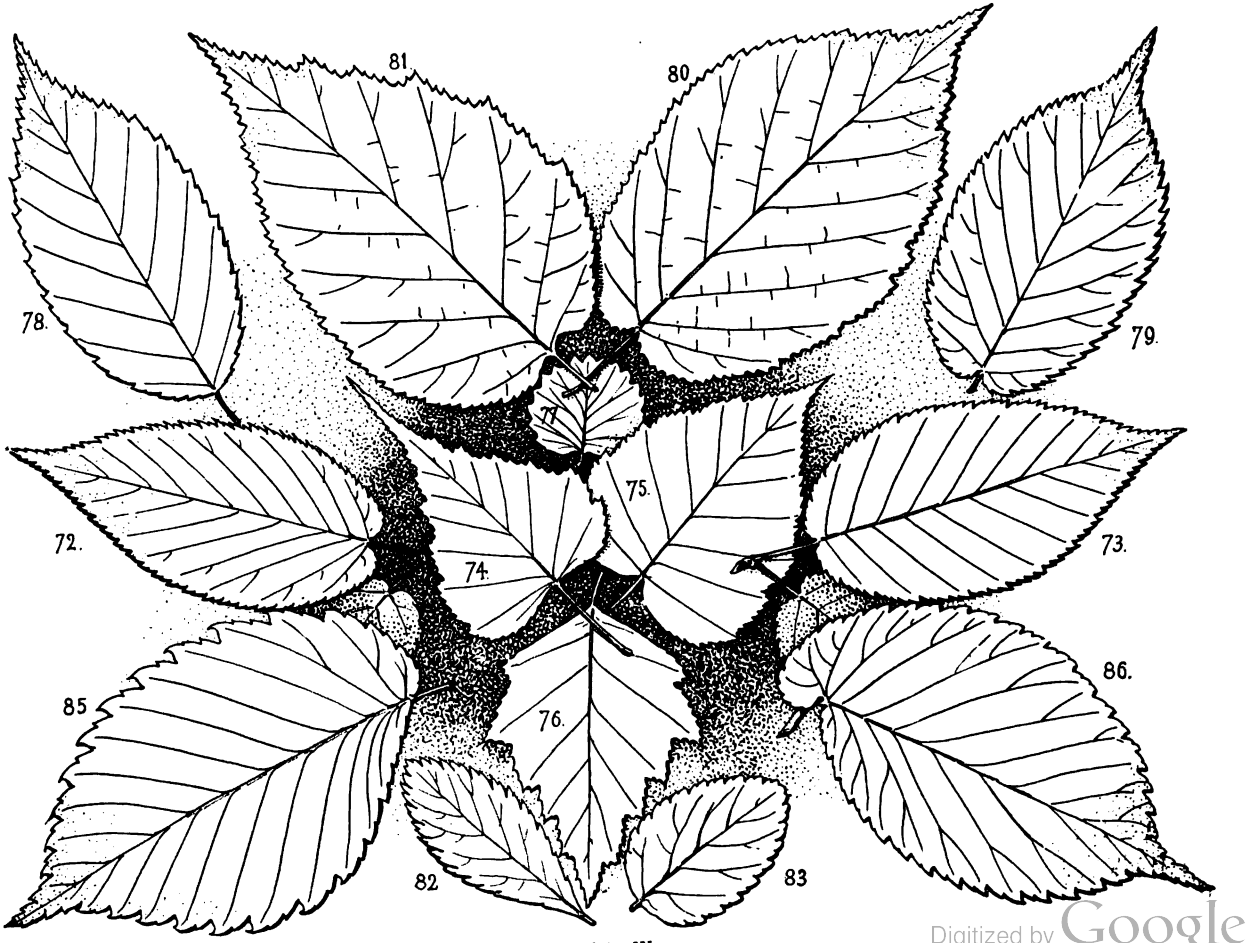


Plate IX.

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Plate X. Poplars and Willows.

Leaves roundish, long stalked.

Round, irregular cut lobes and teeth, white and woolly below 88
Round, 5 to 9 large, irregular cut, rounded teeth on each side 87
Egg shaped, large, regular, rounded sawteeth 89
Heart shaped, large regular, rounded sawteeth 90
Heart shaped, thin, fine sawteeth with silky fringe 91
Heart shaped, thick, leathery, regular sawtoothed 92
Diamond shaped, broader than long 93

Leaves long, short stalked.

Leaves very narrow and long.
- Edge smooth, satin white below 94
- Edge smooth, both sides woolly 95
- Edge fine toothed, smooth below 96
- Fine sawtoothed, green both sides 97
- Fine sawtoothed, gray silky below 98
- Fine sawtoothed, silky when young, smooth 99
- Fine sawtoothed, whitish below 100
- Very fine sawtoothed, green both sides 101

Leaves narrow oval.
- Irregular sawtoothed; whitish, smooth below 102
- Sawtoothed; white, hairy, silky, below 103

Leaves narrow egg shaped.
- Sides irregular toothed, smooth at point and bottom 104
- Irregular toothed, heart shaped at leafstalk 105
- Fine sawtoothed, smooth and very shiny both sides 106

Leaves pear shaped.
- Edge smooth or slightly wavy, grayish and woolly both sides 107
- Edge wavy; soft, crinkly, above, gray and woolly below 108
- Edge smooth, whitish and smooth below 109
- Edge toothed, dull, and smooth, veins hairy below 110
- Edge fine toothed, smooth 111
- Edge coarse sawtoothed, sharp pointed, smooth 112

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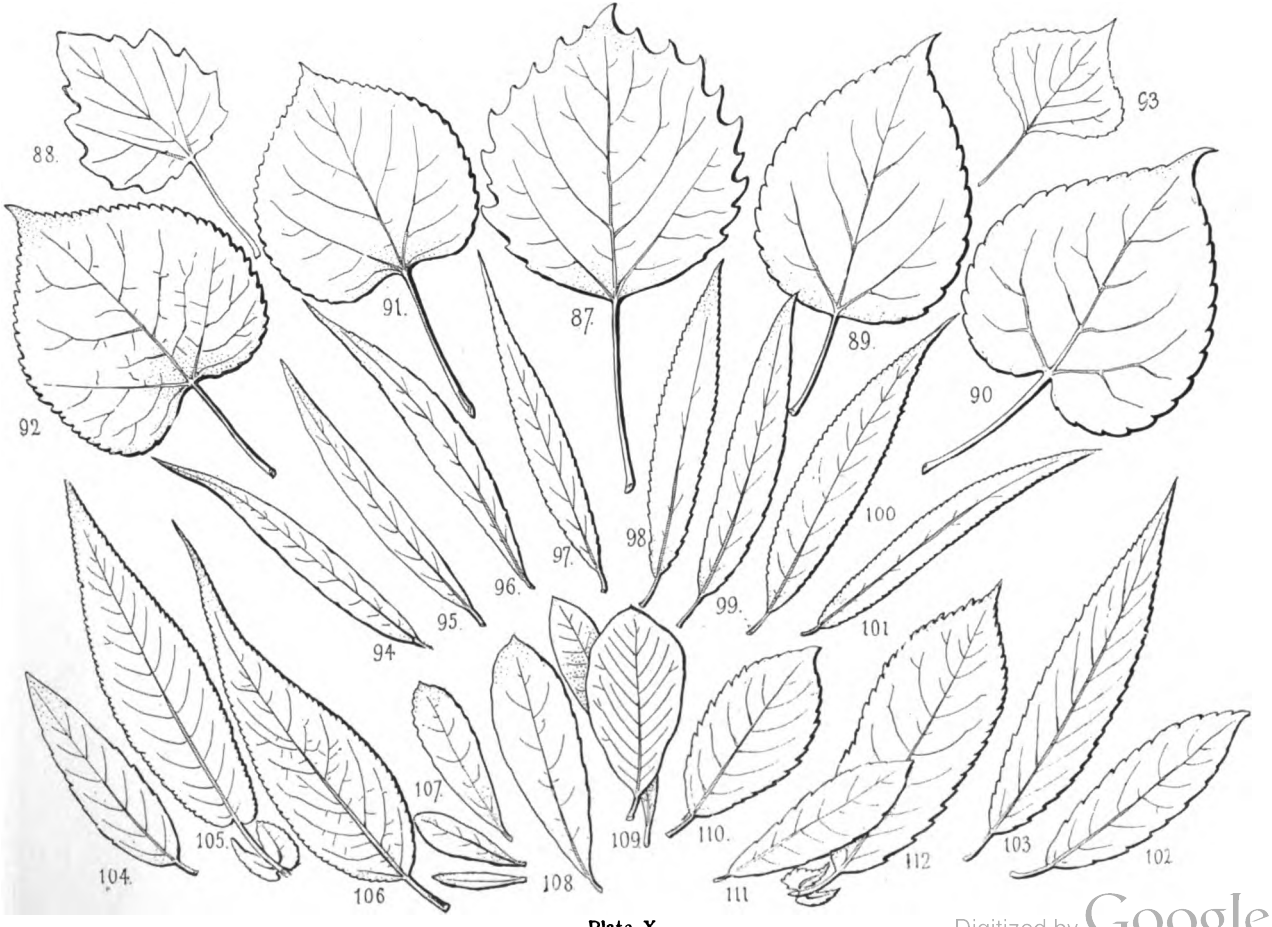


Plate X.

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Plate XI.

- Leaves narrowed or pointed at leafstalk.
 - 1 or 2 teeth on each side.
 - Sometimes no teeth 122
 - Evergreen, leathery 125
 - Aromatic odor 130
 - Only upper half sawtoothed.
 - 4 or 5 teeth only; aromatic odor 129
 - Regular sawtoothed 127
 - Sawtoothed.
 - Irregular, distant teeth 124
 - Large, spiny teeth, evergreen 121
 - Large, coarse sawtoothed 113
 - Prickly teeth 131
 - Fine sawtoothed, oval; shrub 123
 - Fine sawtoothed, roundish; tree 119
 - Leaf irregular, fine sawtoothed, smooth bottom, long pointed, 118
- Leaves rounded at leafstalk.
 - Oval, fine sawtoothed; a vine 128
 - Oval, sawtoothed; a shrub 120
 - Egg shaped, 3 nerved 126
 - Large oval, short teeth, far apart 114
 - Large, roundish heart shaped, regular sawtoothed 117
 - Irregular, one side heart shaped, the other roundish 115
 - Irregular diamond shaped, irregular wavy toothed 116

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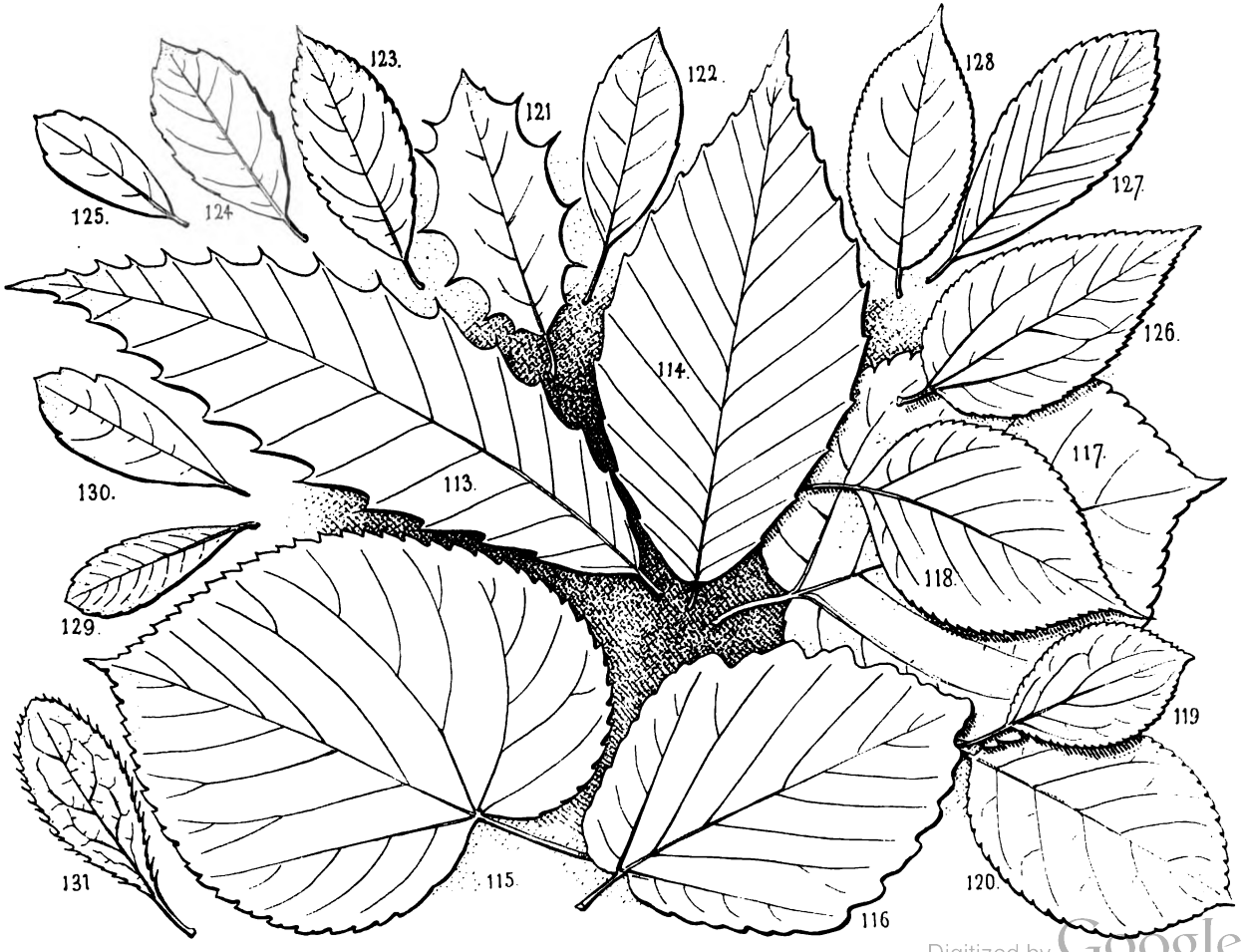


Plate XI.

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Plate XII.

- **Alternate.**
 - Pointed at leafstalk.
 - Pear shaped, small spots on mid-rib 133
 - Pear shaped, oval, double sawtoothed 134
 - Pear shaped, sawtoothed 136
 - Pear shaped, wavy edge 138
 - Rounded at leafstalk.
 - Oval and blunt 132
 - Oval and pointed 135
 - Egg shaped, long pointed 137
 - Oval, thick, leathery, shiny 139
 - Pear shaped, heart shaped at leafstalk 140
- **Opposite.**
 - Long egg shaped, wavy toothed 141
 - Oval, fine toothed, rusty below, leaf grows down on stalk 142
 - Oval, fine sawtoothed, not rusty, stalk not leafy 147
 - Roundish, heart shaped, fine, regular toothed 146
 - Roundish, or long heart shaped, sawtoothed, large teeth 143
 - 3 lobed, heart shaped at leafstalk, lobes pointed 144
 - 3 lobed, straight, rounded, or pointed at leafstalk; some small warts 145

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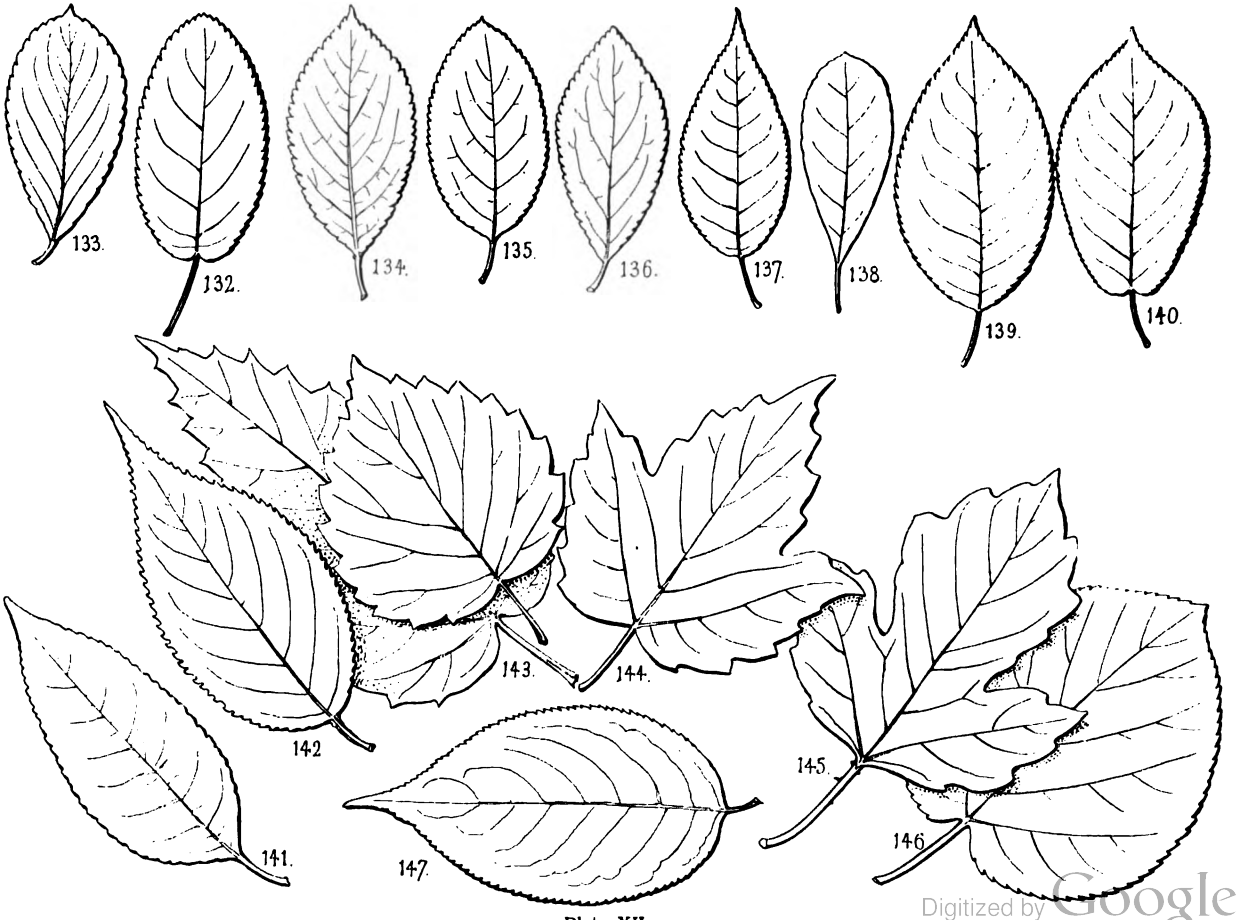


Plate XII.

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Plate XIII.

- Climbing vines, not evergreen. heart shaped.
 - Thorny . . . 148
 - Not thorny . . . 149
- TRAILING CREEPING EVERGREEN.
 - Toothed.
 - Pear shaped . . . 181
 - Egg shaped . . . 182
 - Pear shaped.
 - Very short leafstalk . . . 180
 - Leaf narrow, longer leafstalk, trailing . . . 185
 - Oval.
 - Round, both ends . . . 187
 - Pointed both ends . . . 183
 - Round, long stalk . . . 184
 - Heart shaped, no stalk . . . 186
- LOW BUSHES.
 - Pear shaped.
 - Pointed.
 - Leaf small and narrow, no stalk . . . 161
 - Leaf larger, on leafstalk . . . 164
 - Rounded.
 - With short point, edge smooth . . . 166
 - No point, upper half wavy, evergreen . . . 177
 - Egg shaped.
 - Small and narrow.
 - Pointed . . . 160
 - Blunt, evergreen . . . 179
 - Small, heart shaped, evergreen . . . 176
 - Edge smooth . . . 167
 - Fine, sawtoothed . . . 163
 - Oval.
 - Not evergreen.
 - Pointed.
 - Edge smooth . . . 164
 - Edge slightly toothed on sides . . . 162
 - Blunt and opposite.
 - Leaves in 3's, stalked . . . 172
 - No stalk . . . 173
 - Evergreen.
 - Very narrow and small, pointed . . . 178
 - Rounded both ends . . . 175
 - Hairy on leafstalk . . . 174
- Leaves scalelike, clasping the stem . . . 168
- SHRUBS AND TREES.
 - Evergreen.
 - Pear shaped, long stalk, pointed . . . 171
 - Oval, short stalk, pointed . . . 170
 - Oval, very short stalk, blunt . . . 169
 - Oval.
 - Very short leafstalk.
 - Rounded sawteeth . . . 158
 - Indistinctly toothed on sides . . . 157
 - Fine, hairy, toothed . . . 159
 - Edge smooth . . . 159
 - Wavy, woolly underneath . . . 159
 - No leafstalk, stem jointed, edge smooth . . . 156
 - Longer leafstalk.
 - Long and blunt . . . 153
 - Rounded at leafstalk, tree . . . 150
 - Pointed or narrowed in leafstalk, tree . . . 151
 - Pear shaped.
 - Rounded point . . . 165
 - Long and narrow, hairy on edge.
 - Smooth . . . 154
 - Downy below . . . 155
 - Broad, limbs grow horizontal, tree . . . 151
 - Broad, aromatic odor, a shrub . . . 152

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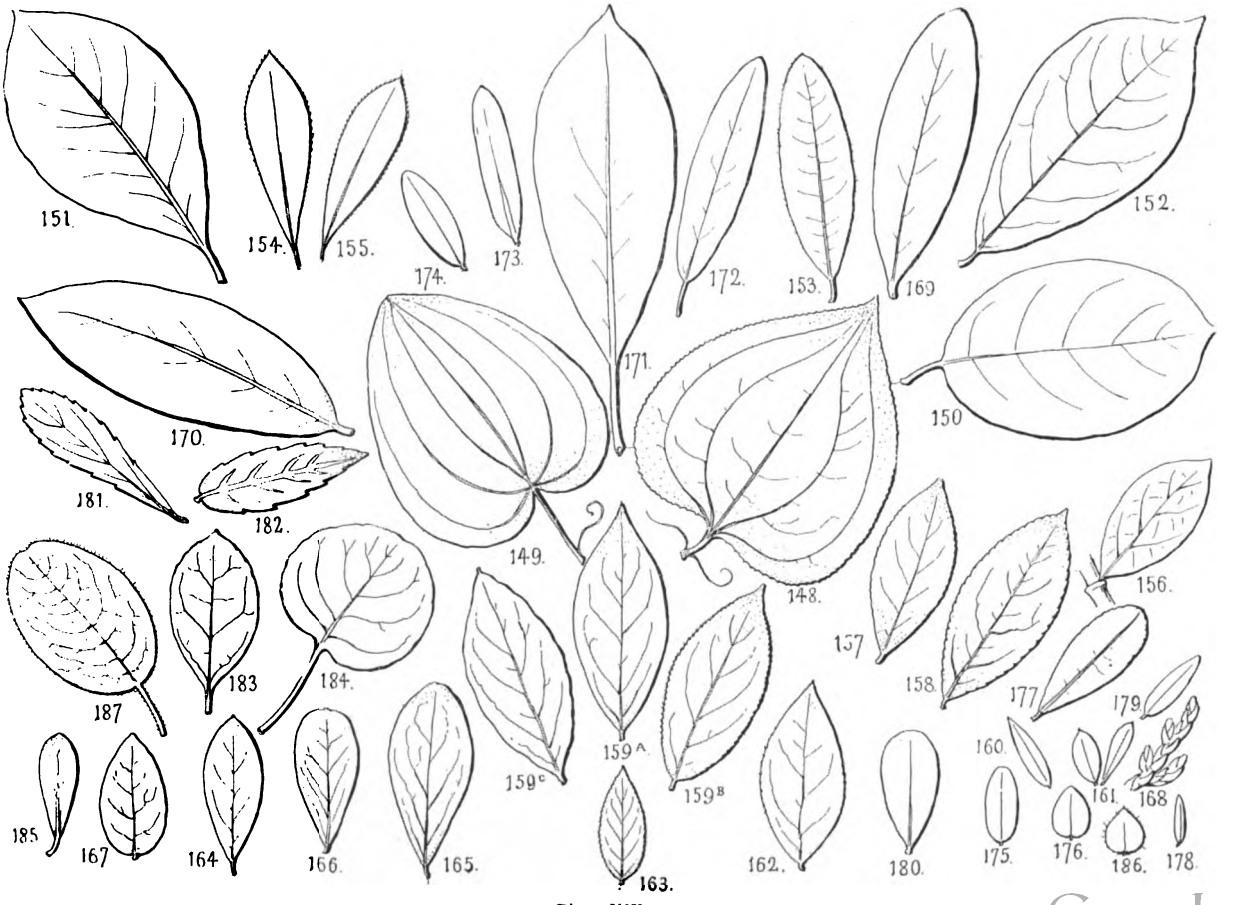


Plate XIII.

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Plate XIV.

- Creeping evergreens.
 - Round, sparingly toothed 202
 - Egg shaped, edge smooth 203
- Leaves alternate, narrow egg shaped, long pointed 193
- Leaves opposite. Trees and shrubs.
 - Pointed both ends.
 - Round 190
 - Broad egg shaped 189
 - Oval; bark red 191
 - Narrow egg shaped 192
 - Narrow oval; silky below . . . 194
 - Leaves in 4's or 6's; low plant . 188
 - Long pear shaped, short point . . 195
 - Rounded at leafstalk.
 - Egg shaped, mostly in 3's . . 196
 - Egg shaped, blunt or oval . . 198
 - Egg shaped, pointed 197
 - Egg shaped, leaves connected around stem 199
- Leaves opposite, upper leaves connected around the stem. Vines.
 - Leaves narrow, pointed . 200
 - Long oval, blunt . . . 201

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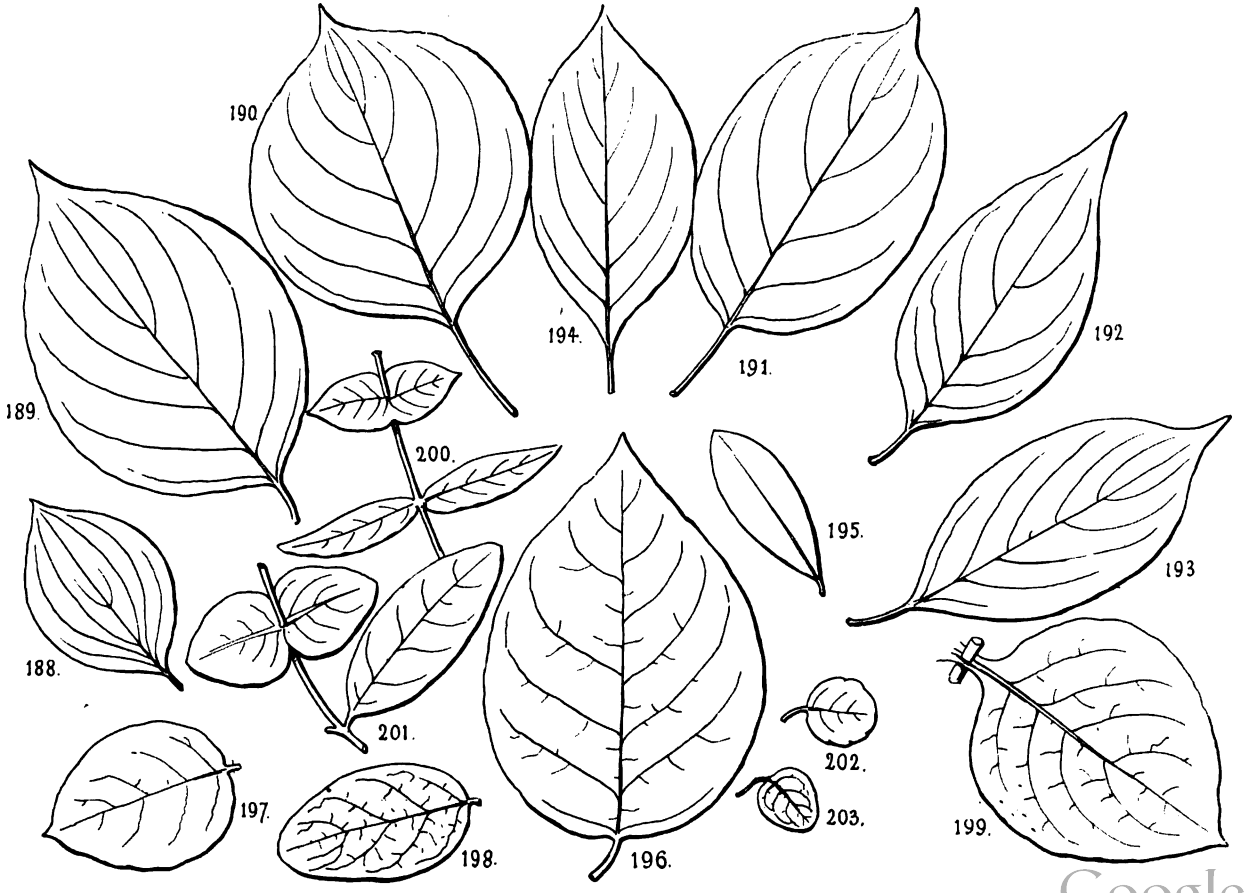


Plate XIV.

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Plate XV. Needle Woods

- **Needles growing in bunches.**
 - 2 in each bunch 205
 - 3 in each bunch 206
 - 5 in each bunch 207
 - Many in a bunch, not evergreen 204
- **Needles growing single all round the stem.**
 - Needles flat, point blunt 208
 - Needles four edged, sharp pointed 209
- **Needles growing on top and sides only.**
 - Needles flat, blunt, upper one smaller 210
 - Needles flat, pointed 215
 - Needles sharp, prickly, in 3's of equal size . . . 214
- **Needles of 2 kinds.** **Scales on young shoots.**
 - Young shoots, 4 edged 213
 - Branches flat, slender, bluish green 212
 - Compact, broad, dark green 211

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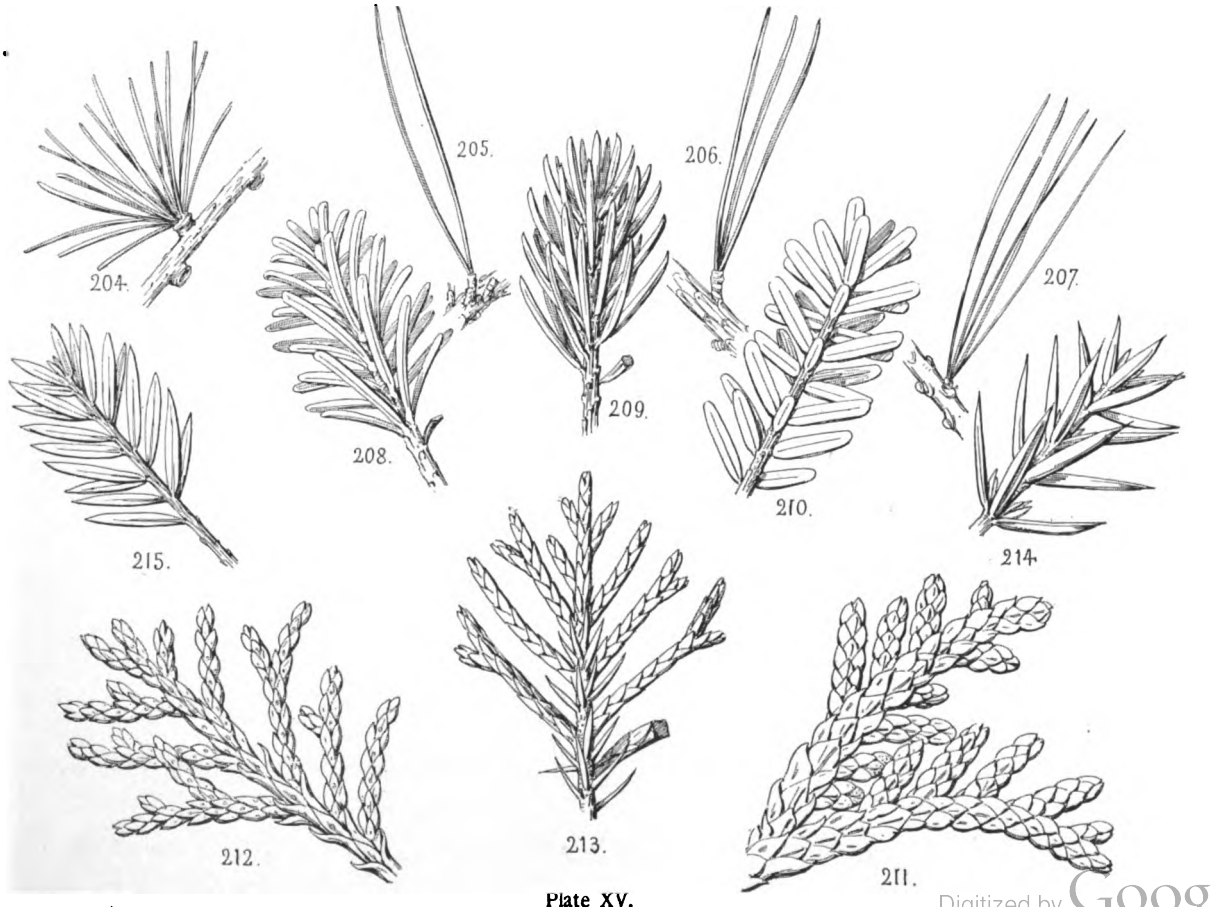


Plate XV.

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1. **Shellbark.** *Carya alba.* Tree, 80 ft. Shaggy bark, best of the nuts to eat, husk separate in 4 parts, nut pointed.

2. **Pignut.** *Carya glabra.* Tree, 70 ft. Bark light blue-gray, finely cracked, fruit pear shaped, kernel bitter; nuts from some trees are edible.

3. **Walnut.** *Carya tomentosa.* Tree, 70 ft. Bark dark ash-gray, rough furrowed, kernel sweet, leaves strong scented, nut round oval.

4. **Bitternut.** *Carya amara.* Tree, 70 ft. Light-gray bark, less rough, fruit round, smooth, nutshell thin, kernel very bitter.

5. **Black Walnut.** *Juglans nigra.* Tree, 70 ft. Bark dark gray, rough, fruit short stemmed, round, smooth, husk spongy, kernel oily, rich.

6. **Butternut.** *Juglans cinerea.* Tree, 40 ft. Bark gray, rough furrowed, fruit long stemmed, egg shaped, leathery husk, kernel oily but sweet.

7. **Wild Sarsaparilla.** *Aralia hispida.* 2 ft. The aromatic, spicy rootstock only woody, the shoots herb-like, black berries in a bunch. There are several kinds.

8. **American Mountain Ash.** *Pyrus Americana.* Shrub or slender tree, 20 ft. White blossoms, berries bright orange-red.

9. **European Mountain Ash.** *Pyrus aucuparia.* 40 ft. Has larger fruits.

10. **Staghorn Sumach.** *Rhus typhina.* Tree, 20 ft. Fruit scarlet, flowers yellowish-green; young shoots covered with wool.

11. **Smooth Sumach.** *Rhus glabra.* Shrub, 10 ft. Yellowish-green scenting flowers, fruit velvety crimson, shoots smooth.

12. **Poison Ivy.** *Rhus toxicodendron.* Creeping and climbing; flowers yellowish-white; poisonous to touch.

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13. **Shining Dwarf Sumach.** *Rhus copallina.* Shrub, 6 ft. Branches and footstalks brown dotted, berries crimson.

14. **Poison Dogwood.** *Rhus venenata.* Shrub, 15 ft. Stem gray, young shoots purplish. Our most poisonous plant.

15. **Locust.** *Robinia pseudacacia.* Tree, 30 ft. Flowers yellowish-white, beautifully scented, fruit a bean.

16. **Prickly Ash.** *Xanthoxilum Americanum.* Shrub, 5 ft. Stem gray, shoots brown, wood yellow, bark bitter.

17. **Raspberry.** *Rubus strigosus.* Shrub, 4 ft. Flowers white, berries light red and finely flavored.

18. **Thimbleberry.** *Rubus occidentalis.* Shrub, 3 ft. Flowers white, berries purplish-black and good.

19. **Dwarf Raspberry.** *Rubus triflorus.* Shrub, 1 ft. Fruit a few red grains.

20. **High Blackberry.** *Rubus villosus.* Shrub, 6 ft. Berries black, large and late. There is a smooth and smaller trailing variety.

21. **Low Blackberry.** *Rubus Canadensis.* Trailing. Berries black, large, and sweet; early.

22. **Swamp Blackberry.** *Rubus hispidus.* Trailing. Berries of a few grains, red or purple, sour.

23. **Dwarf Rose.** *Rosa lucida.* Shrub, 2 ft. Flower rose color, fruit smooth.

24. **Swamp Rose.** *Rosa Carolina.* Shrub, 7 ft. Flower rose color, fruit bristly.

25. **Clematis, or Virgin's Bower.** *Clematis Virginiana.* Climbing. Flowers white, fruit feathery.

26. **Bladdernut.** *Staphylea trifolia.* Shrub, 10 ft. Fruit a large, skinny pouch containing seeds; grows in wood swamps.

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27. **Red Elder.** *Sambuccus pubens.* Shrub, 6 ft. Flowers white, berries red.

28. **Black Elder.** *Sambuccus Canadensis.* Shrub, 10 ft. Flowers white, fruit purplish-black, pleasant.

29. **Black Ash.** *Fraxinus sambuccifolia.* Tree, 70 ft. Slender, dark granite-gray bark; shoots yellowish with lighter dots.

30. **Red Ash.** *Fraxinus pubescens.* Tree, 50 ft. Dark ashy-gray bark.

31. **White Ash.** *Fraxinus accuminata.* Tree, 70 ft. Whitish bark; shoots gray-green, dotted gray.

32. **Buttonwood (Sycamore).** *Platanus occidentalis.* Tree, 100 ft. Bark gray, peeling off, showing light under bark.

33. **Sweet Gum Tree.** *Liquidambar styraciflua.* Tree, 40 ft. Gray bark, with corky ridges on the branches; leaves fragrant when bruised.

34. **Swamp Gooseberry.** *Ribes lacustre.* Berries small, dark purple, and bristly.

35. **Roundleafed Gooseberry.** *Ribes rotundifolium.* Berries small, purple, smooth, and sweet.

36. **Smooth Wild Gooseberry.** *Ribes hirtellum.* Shrub, 3 ft. Berries small, purple, sweet, and smooth.

37. **Prickly Wild Gooseberry.** *Ribes cynosbati.* Shrub, 3 ft. Berries large, covered with long prickles.

38. **Red Flowering Raspberry.** *Rubus odoratus.* Shrub, 5 ft. Flowers large, purple-rose color; berries of few reddish grains.

39. **Black Currant.** *Ribes floridum.* Shrub, 4 ft. Flowers large, berries black.

40. **Red Currant.** *Ribes rubrum.* Shrub, 3 ft. Straggling; fruit red and smooth.

41. **Red Swamp Currant.** *Ribes prostratum.* Stem low, straggling; berries red and bristly, smelling skunky.

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42. **Moonseed.** *Menispermum Canadense.* Climbing vine. Flowers white; fruit grape-like; black berries.

43. **White Maple.** *Acer dasycarpum.* Tree, 60 ft. Stem gray; shoots light green-yellow, with brown dots or stripes.

44. **Sugar Rock, or Maple.** *Acer saccharinum.* Tree, 80 ft. Stem blue-gray. From the sap of this tree maple sugar is made.

45. **Red Maple.** *Acer rubrum.* Tree, 40 ft. Stem gray; shoots crimson, dotted with brown.

46. **Mountain Maple.** *Acer spicatum.* Shrub, 10 ft. Light gray, with olive stripes; shoots light fresh green; when older, light purple dotted or striped green.

47. **Striped Maple.** *Acer Pensylvanicum.* Tree, 20 ft. Stem brown striped; shoots green, white striped.

48. **Virginian Creeper.** *Ampelopsis quinquefolia.* Vine. Berries upright, dark blue.

49. **Fox Grape.** *Vitis labrusca.* Vine. Grapes dark purple, black, or white, in close bunches; Berries large, some pleasant. Early and late varieties.

50. **Summer Grape.** *Vitis aestivalis.* Vine. Grapes dark blue, loose in the bunch; agreeable; ripe in October.

51. **Chicken Grape.** *Vitis cordifolia.* Vine. Grape dark purple, almost black; as large as a pea; acid, but good; ripens late.

52. **Rough or Post Oak.** *Quercus obtusiloba.* Tree, 30 ft. Acorns on very short stems; small and sweet.

53. **Overcup Oak.** *Quercus macrocarpa.* Tree, 40 ft. Acorns 1 in. long, deep in a mossy, fringed cup.

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54. **White Oak.** *Quercus alba.* Tree, 60 ft. Acorns 1 in. long; eatable, particularly when roasted.

55. **Swamp Oak.** *Quercus discolor.* Tree, 60 ft. Whitish shaggy bark, peeling off in shreds; many horizontal branches; acorns sweet.

56. **Rock Chestnut Oak.** *Quercus monticola.* Tree, 50 ft. Acorn 1 in. long, sweet; bark reddish-gray.

57. **Dwarf Chestnut Oak (Chinquapin).** *Quercus prinoides.* Shrub, 4 ft. Our smallest oak. Acorns sweet, many on a limb; bark bitter.

58. **Chestnut Oak.** *Quercus castanea.* Tree, 30 ft. Bark whitish, wood very yellow; acorns ¾ in. long, sweet, and eatable.

59. **Scrub Oak.** *Quercus ilicifolia.* Shrub, 8 ft. Bark greenish-black, dotted with gray; acorns ½ in. long, bitter.

60. **Black Oak.** *Quercus tinctoria.* Tree, 90 ft. Under bark yellow, wood reddish; acorns ½ in. long, very bitter, kernel yellow.

61. **Red Oak.** *Quercus rubra.* Tree, 75 ft. Bark dark green-gray, smooth; acorns 1 in. long, kernel white and bitter.

62. **Scarlet Oak.** *Quercus coccinea.* Tree, 70 ft. Bark reddish-gray, under bark reddish; acorns ½ in. long, kernel white and bitter.

63. **Speckled Alder.** *Alnus incana.* Shrub or tree, 20 ft. Bark reddish or dark green, with light gray dots.

64. **Common Alder, or Gray Alder.** *Alnus serrulata.* Shrub, 15 ft. Bark gray, with horizontal, oblong, gray-orange dots.

65. **Scarlet Hawthorn.** *Crætagus coccinea.* Tree, 20 ft. Flowers white, rosy tinted; berries bright scarlet-red.

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66. **Black or Pear Thorn.** *Crætagus tomentosa.* Tree, 15 ft. Berries crimson or orange colored; roundish pear shaped; edible.

67. **Dotted Fruit Thorn.** *Crætagus punctata.* Tree or shrub, 15 ft. Berries dull red, yellowish with white dots.

68. **Cockspur Thorn.** *Crætagus crusgalli.* Tree, 20 ft. Berry bright red; slender, long thorns.

69. **Sassafras Tree.** *Sassafras officinalis.* Tree, 30 ft. Young shoots, bright green; oval, dark blue berries, on red stems.

70. **Liriodendron, or Tulip Tree.** *Liriodendron tulipifera.* Tree, 100 ft. Flowers, 2 in. wide, greenish-yellow, marked with orange.

71. **Sweetfern.** *Comptonia asplenifolia.* Shrub, 2 ft. A round-headed bush; leaves fragrant.

72. **Black Birch.** *Betula lenta.* Tree, 80 ft. Bark dark purplish, smooth; leaves aromatic, spicy.

73. **Yellow Birch.** *Betula excelsa.* Tree, 80 ft. Bark dirty yellowish-gray, with silvery lustre, peeling off and shaggy.

74. **White Birch.** *Betula populifolia.* Tree, 40 ft. Bark chalky white, with black spots.

75. **Canoe Birch.** *Betula papyracea.* Tree, 100 ft. Bark white, with pearly shine.

76. **Red Birch.** *Betula nigra.* Tree, 50 ft. Bark reddish-chocolate color, ragged and broken.

77. **Dwarf Birch.** *Betula pumila.* Shrub, 2 ft. Bark brownish, dotted with warty specks.

78. **Hornbeam.** *Carpinus Americana.* Tree, 20 ft. Stem ridged; bark bluish-gray, smooth; nuts 8 sided, taste like chestnuts; white, hard wood.

79. **Iron or Leverwood.** *Ostrya Virginica.* Tree, 40 ft. Bark brownish, finely furrowed; very hard, white wood: nut small and smooth.

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80. **Common Hazel Nut.** *Corylus Americana.* Shrub, 8 ft. Fruit cover leafy.

81. **Beaked Hazel Nut.** *Corylus rostrata.* Shrub, 6 ft. Fruit cover long-beaked and bristly.

82. **Meadow Sweet.** *Spiræa salicifolia.* Shrub, 6 ft. Flowers white; stem red-copper color.

83. **Hardhack.** *Spiræa tomentosa.* Shrub, 5 ft. Flowers purple-rose color; stem dark bronze.

84. **Ninebark.** *Spiræa opulifolia.* Shrub, 7 ft. Flowers white, with rosy tinge.

85. **American Elm.** *Ulmus Americanus.* Tree, 120 ft. Branches often cover 100 ft.

86. **Slippery Elm.** *Ulmus fulva.* Tree, 50 ft. Inner bark eatable.

87. **Large Toothed Poplar.** *Populus grandidentata.* Tree, 50 ft. Bark light greenish-gray, smooth, leathery.

88. **Silver Poplar.** *Populus alba.* Tree, 70 ft. Light gray bark and white foliage.

89. **Balsam Poplar.** *Populus balsamifera.* Tree, 80 ft. Bark light gray, smooth, leather-like.

90. **Balm of Gilead.** *Populus candicans.* Tree, 100 ft. Bark light gray, and large, sticky leaf buds.

91. **American Aspen.** *Populus tremuloides.* Tree, 40 ft. Bark white clay-colored, smooth, and leathery; dark brown, triangular blotches under the limbs.

92. **Necklace Poplar** (Cottonwood). *Populus monilifera.* Tree, 80 ft. Bark dark gray; fruit with large, white, cotton tufts.

93. **Lombardy Poplar.** *Populus dilatata.* Tree, 70 ft. Bark brown-gray; branches not spreading, shape like a shut umbrella.

94. **Basket Osier.** *Salix viminalis.* Small tree, 15 ft. Best willow for basket work; grows in wet meadows.

95. **Hoary Willow.** *Salix candida.* Shrub, 5 ft. Twigs reddish; a whitish-looking bush.

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96. **Long-Leaved Willow.** *Salix longifolia.* Tree, 20 ft. Stems and branches often laying on the ground, taking root.

97. **Weeping Willow.** *Salix Babylonica.* Tree, 25 ft. Branches and leaves drooping.

98. **Silky-Leaved Willow.** *Salix sericea.* Shrub, 10 ft. Of grayish appearance, on sandy river-banks.

99. **Stalked Willow.** *Salix petiolaris.* Shrub, 10 ft.

100. **Brittle Willow.** *Salix fragilis.* Tree, 40 ft. Bark very rough; young shoots, smooth, polished green.

101. **Black Willow.** *Salix nigra.* Tree, 25 ft. Rough bark.

102. **Silky-Headed Willow.** *Salix ericephalus.* Shrub or small tree, 15 ft. Fruit long, silky.

103. **White Willow.** *Salix alba.* Tree, 80 ft. Young shoots bright yellow or reddish.

104. **Smooth Willow.** *Salix discolor.* Shrub, 15 ft. Grows in low meadows.

105. **Heart-Shaped Willow.** *Salix cordata.* Shrub or small tree, 15 ft.

106. **Shining Willow.** *Salix lucida.* Shrub or tree, 15 ft. Beautiful, glossy.

107. **Dwarf Gray Willow.** *Salix tristis.* Shrub, 1½ ft.

108. **Low Bush Willow.** *Salix humilis.* Shrub, 8 ft.

109. **Stalk-Fruited Willow.** *Salix pedicellaris.* Shrub, 3 ft.

110. **Long-Beaked Willow.** *Salix rostrata.* Small tree, 15 ft.

111. **Purple Willow.** *Salix purpurea.* Small tree, 15 ft. Polished olive-colored branches.

112. **Salix Rigida.** Shrub, 15 ft.

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113. **Chestnut.** *Castanea vesca.* Tree, 100 ft. 3 sweet nuts in a burr, bark, dark lead-gray.

114. **Beach.** *Fagus ferruginea.* Tree, 70 ft. 2 triangular nuts in each cup; bark light gray, smooth.

115. **Linden, Basswood.** *Tilia Americana.* Tree, 40 ft. Yellowish-white fragrant flowers.

116. **Witch Hazel.** *Hamamelis Virginica.* Shrub, 20 ft. Yellow flowers; late in autumn when leaves have fallen.

117. **Mullberry Red.** *Morus rubra.* Tree, 30 ft. Dark purple, blackberry-like berries.

118. **Hackberry Nettletree.** *Celtis occidentalis.* Tree, 40 ft. Sweet cherry-like berries.

119. **Buckthorn Common.** *Rhamnus catharticus.* Small tree, 20 ft. Black, purging berries in clusters.

120. **Alderleafed Buckthorn.** *Rhamnus alnifolius.* Shrub, 3 ft. Black pear shaped berries with 3 kernels.

121. **Holly.** *Ilex opaca.* Tree, 20 ft. Flowers white, bright scarlet-red berries.

122. **Canadian Holly.** *Nemopanthus Canadensis.* Shrub, 10 ft. Beautiful pale crimson berries on long red stems.

123. **Winterberry (Black Alder).** *Ilex verticillata.* Shrub, 10 ft. Bright red berries on short stems, scattered on branches.

124. **Singleberry Holly.** *Ilex lævigata.* Shrub, 10 ft. Orange-red berries on very short stems.

125. **Inkberry.** *Ilex glabra.* Shrub, 6 ft. Evergreen white flowers and black berries.

126. **New Jersey Tea.** *Ceanothus Americanus.* Shrub, 3 ft. White flowers, in clusters; white flower stems.

127. **Clethra.** *Clethra alnifolia.* Shrub, 6 ft. White fragrant flowers, late in August.

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128. **Stafftree (Waxwork).** *Celastrus Scandens.* Vine, orange-red berries, in clusters.

129. **Sweet Gale.** *Myrica gale.* Shrub, 4 ft. A dark bush, growing in patches in swamps.

130. **Bayberry (Wax Myrtle).** *Myrica cerifera.* Shrub, 7 ft. Leaves and berries with balsamic odor.

131. **Barberry (Common).** *Berberis vulgaris.* Shrub, 6 ft. Flowers yellow, long oval, orange berries in clusters, thorny, wood yellow.

132. **Shadbush.** *Amelanchier Canadensis.* Shrub, or small tree, 15 ft. Pear shaped purplish berries, sweet.

133. **Chokeberry.** *Pyrus arbutifolia.* Shrub, 5 ft. Reddish-purple, dry puckery berry.

134. **Yellow Plum.** *Prunus Americana.* Tree, 15 ft. Reddish-orange, puckery plum.

135. **Beach Plum.** *Prunus maritima.* Shrub, 4 ft. Plum roundish, purple.

136. **Bullace Tree.** *Prunus spinosa.* Tree, 15 ft. Plum round, black, with yellowish bloom.

137. **Wild Red Cherry.** *Cerasus Pensylvanica.* Tree, 15 ft. Small, sour, red cherries.

138. **Sandcherry.** *Cerasus pumila.* Trailing, 1 ft. Dark red cherries; eatable.

139. **Black, or Rum Cherry.** *Cerasus serotina.* Tree, 40 ft. Black-purplish, aromatic cherries.

140. **Choke Cherry.** *Cerasus Virginiana.* Tree, 10 ft. Dark red, pleasant, but puckery cherries.

141. **Withe Rod.** *Viburnum nudum.* Shrub, 10 ft. Berries dark blue.

142. **Sweet Viburnum.** *Viburnum lentago.* Shrub, 15 ft. Berries dark scarlet color.

143. **Arrow Wood.** *Viburnum dentatum.* Shrub, 10 ft. Berries dark blue-lead color.

144. **Maple-Leafed Arrow Wood.** *Viburnum acrifolium.* Shrub, 6 ft. Berries blue-black.

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145. **Cranberry Tree.** *Viburnum opulus.* Shrub, 10 ft. Berries red, pleasant acid.

146. **Wayfaring Tree (Hobblebush).** *Viburnum lantanoides.* Shrub, 20 ft. Berries egg shaped, dark red.

147. **3 Flowered Buckthorn.** *Diervilla trifida.* Shrub, 4 ft. Flowers yellow.

148. **Greenbriar.** *Smilax rotundifolium.* Thorny vine, green stem, blue-black berries.

149. **Smilax Carrion Flower.** *Smilax herbacea.* Vine not thorny, flowers stink.

150. **Persimmon.** *Diospyros, Virginiana.* Tree, 30 ft. Plumlike, fruit edible after frost.

151. **Tupelo, Pepperidge.** *Nyssa multiflora.* Tree, 30 ft. Horizontal branches, blue berries.

152. **Feverbush.** *Benzoin odoriferum.* Shrub, 10 ft. Flowers yellow, berries red, leaves fragrant.

153. **Rhodora.** *Rhodora Canadensis.* Shrub, 5 ft. Flower purple rose color.

154. **White Azalea (Swamp Pink).** *Azalea viscosa.* Shrub, 8 ft. White fragrant flowers.

155. **Pink Azalea.** *Azalea nadiflora.* Shrub, 5 ft. Dark red flower, fragrant before leaves.

156. **Leather Wood.** *Dirca palustris.* Shrub, 5 ft. Bark very tough, stem looks jointed.

157. **Staggerbush.** *Leucothoe racemosa.* Shrub, 6 ft. White flower, cylindrical bell shaped.

158. **Andromeda Ligustriana.** Shrub, 8 ft. White flower, round, globular bell shaped.

159. **High-Bush Blueberry.** *Vaccinum corymbosum.* Shrub, 8 ft.
 - (*a*) Leaves and edge smooth (*glabrum*).
 - (*b*) Leaves and edge bristly, hairy (*amœnum*).
 - (*c*) Leaves woolly below, berries black (*atrococcum*).

160. **Pinweed.** *Lechea.* Heath-like bushes, 1 ft. Purple-brown flowers.

161. **Sunrose.** *Helianthemum Canadense.* 1 ft. Flower yellow.

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102. **Medium Blueberry.** *Vaccinum vacillans.* Shrub, 2 ft. Late blueberry.

163. **Low Blueberry.** *Vaccinum Pensylvanicum.* Shrub, 1 ft. Earliest blueberry; also a black variety.

164. **Huckleberry.** *Gaylussacia resinosa.* Shrub, 2 ft. Berries shining black, sweet; leaves dotted below.

165. **Dangleberry.** *Gaylussacia frondosa.* Shrub, 5 ft. Berries large, blue on slender stem; acid.

166. **Canada Huckleberry.** *Gaylussacia dumosa.* Shrub, 2 ft. Berries large, black, tasteless.

167. **Deerberry.** *Vaccinum stamineum.* Shrub, 3 ft. Berries greenish-white. Not eatable.

168. **Hudsonia.** Heath-like sand plants, 6 in., of gray aspect; flowers yellow.

169. **Rhododendron (Rose Bay).** *Rhododendron maximum.* Shrub, 7 ft. Flowers pale rose color.

170. **Magnolia.** *Magnolia glauca.* Shrub, 8 ft. Flowers large, white.

171. **Laurel.** *Kalmia latifolia.* Shrub, 8 ft. Flowers white, and pinkish-white.

172. **Sheep's Laurel.** *Kalmia angustifolia.* Shrub, 2 ft. Flowers deep rose-red; leaves in 3's.

173. **Dwarf Laurel.** *Kalmia glauca.* Shrub, 1 ft. Flowers pale lilac-purple, leaves opposite.

174. **Labrador Tea.** *Ledum latifolium.* Shrub, 3 ft. Flowers white, leaves rusty-woolly below.

175. **Cranberry.** *Vaccinum macrocarpon.* Shrub, 2 ft. Berries large, bright scarlet-red.

176. **Dwarf Cranberry.** *Vaccinum oxycoccus.* Plant, ½ ft. Berries red, small.

177. **Cassandra.** *Cassandra calyculata.* Shrub, 3 ft. Flowers white, grows in patches in meadows.

178. **Crowberry.** *Corema conradi.* Shrub, 2 ft. Flowers purple, heath-like plant.

179. **Water Andromeda.** *Andromeda polifolia.* Shrub, 1 ft. Flowers snow-white or flesh color.

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180. **Cowberry.** *Vaccinum vitis-idæa.* Shrub, 6 in. Creeping ; berries dark red, bitter.

181. **Wintergreen.** *Chimaphila umbellata.* Plant, 6 in. Flower flesh color.

182. **Wintergreen.** *Chimaphila maculata.* Plant, 4 in. Leaves spotted with white.

183. **Checkerberry (Boxberry).** *Gaultheria procumbens.* Plant, 4 in. Berries red, and leaves spicy.

184. **Pyrola.** Low-creeping evergreens. Flower stems, 8 in. Flowers pale greenish-white.

185. **Bearberry.** *Arctostaphylos uva ursi.* Trailing plant, on rocks. Leaves thick, berries red.

186. **Snowberry.** *Chiogenes hispidula.* Creeping plant with white berries. Edible.

187. **Mayflower.** *Epigæa repens.* Creeping. Flowers rose color, or pearly white, fragrant.

188. **Dwarf Cornel (Bunchberry).** *Cornus Canadensis.* Plant, 6 in. Flowers white, berries red, in bunches.

189. **Flowering Dogwood.** *Cornus florida.* Tree, 10 to 30 ft. Flowers white, berries bright scarlet.

190. **Roundleafed Cornel.** *Cornus circinata.* Shrub, 6 to 10 ft. Flowers white, berries blue, turning whitish.

191. **Red Osier Dogwood.** *Cornus stolonifera.* Shrub, 3 to 6 ft. Blood red stems, fruit white, or lead color.

192. **Panicled Cornel.** *Cornus paniculata.* Shrub, 4 to 8 ft. Flowers white, berries round, pale white.

193. **Alternate Leaved Cornel.** *Cornus alternifolia.* Shrub, 8 to 20 ft. Flowers pale yellowish-white, berries blue-black.

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194. **Silky Cornel (Kinnikinnik).** *Cornus sericea.* Shrub, 3 to 10 ft. Flowers white inside, yellow outside.

195. **Liguster, Privet, Prim.** *Ligustrum vulgare.* Shrub, 8 ft. Flowers white, berries shining black.

196. **Buttonbush.** *Cephalanthus occidentalis.* Shrub, 10 ft. Flowers in yellowish-white balls.

197. **Fly Honeysuckle.** *Lonicera ciliata.* Shrub, 5 ft. Pale greenish-yellow flowers in two, to one red berry.

198. **Hairy Fly Honeysuckle.** *Lonicera cærulea.* Shrub, 3 ft. Flowers yellow, berries blue.

199. **Feverroot (Horsegentian).** *Triosteum perfoliatum.* Shrub, 3 ft. Flowers purple, in clusters, berries orange.

200. **Small Honeysuckle.** *Lonicera parviflora.* Vine. Yellow tinged purple flowers, berries orange.

201. **Hairy Honeysuckle.** *Lonicera hirsuta.* Vine. Flowers pale yellow outside, rich orange inside, berries orange.

202. **Twinflower.** *Linnæa borealis.* Creeping. Flowers in 2's, white and rose-tinted; fruit dry.

203. **Partridge Berry.** *Mitchella repens.* Creeping. Flowers in 2's, white or rose color, fragrant, scarlet berries.

204. **Larch (Hackmatack).** *Larix Americanus.* Tree, 70 ft. Cones ½ in. long; bark bluish-gray.

205. **Red Pine.** *Pinus resinosa.* Tree, 70 ft. Bark reddish, rather smooth; cones 2 in. long, in clusters, not prickly.

206. **Pitch Pine.** *Pinus rigida.* Tree, 60 ft. Very rough, dark bark; very pitchy cones, 2 in. long, prickly.

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207. **White Pine.** *Pinus strobus.* Tree, 150 ft. Bark smooth; cones 5 in. long, not prickly; brittle, soft, white wood.

208. **Balsam Fir.** *Abies balsamea.* Tree, 40 ft. Cones 3 in. long, standing upward on the limbs.

209. **Black Spruce.** *Abies nigra.* Tree, 50 ft. Cones 1 in. long, hanging downwards from limb.

210. **Hemlock Spruce.** *Abies Canadensis.* Tree, 70 ft. Cones ½ in. long; most graceful tree when young; poor wood, very knotty, hard; bark smooth.

211. **Arbor Vitæ.** *Thuja occidentalis.* Tree, 40 ft. Cones small, ½ in. long.

212. **White Cedar.** *Cupressus thyoides.* Tree, 60 ft. Cones as large as peas. In swamps.

213. **Red Cedar.** *Juniperus Virginiana.* Tree, 30 ft. Wood red, fragrant; berries blue.

214. **Dwarf Cedar.** *Juniperus communis.* Spreading shrub, 2 ft. Dark purple berries.

215. **Ground Hemlock.** *Taxus baccata.* Low, struggling bush. Red berries.

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